

## Conveyance for Brightwater

### ***Wastewater Treatment is essential to protect public health & the environment.***

By 2010, our growing population will soon push our wastewater treatment system beyond its capacity. Wastewater from a large part of south Snohomish and north King counties has flowed south to King County's existing treatment plants for almost 40 years. Brightwater, a new regional wastewater treatment system, is being constructed to meet the wastewater treatment needs of this area. Brightwater is comprised of a new treatment plant, conveyance pipes, and a marine outfall to Puget Sound.

Phased construction of the project will begin in 2006. The entire Brightwater system is scheduled to begin operating in 2010.



### ***What is the conveyance system?***

A system of tunnels, pipelines and other facilities are needed to convey, or carry, wastewater to and from Brightwater as part of the treatment process. For Brightwater, the conveyance system will be almost entirely underground.

**Tunnels:** The conveyance tunnels will range in depth from 40 to 445 feet below the surface. The tunnels will be built using specialized laser-guided tunnel-boring machines. Thanks to technology and tunnel depth, people are unlikely to notice any construction activity at street level except at the portals. Once construction is complete, you will not be able to tell the pipes are there.



**Portals:** There are five above-ground construction areas, called portals, for the entire 13-mile long conveyance system. Portals are the access shafts workers and equipment will use to enter and exit the tunnels during construction. The area around the portal shaft will serve as a staging area for materials and equipment. When construction is completed, these areas will be restored to community standards. At some portals, an attractively designed and landscaped above-ground structure will remain – a pump station or an electrical facility, for example. At other portals, facilities will be underground with only a manhole remaining.

**Marine Outfall:** This is where highly-treated wastewater (called effluent) from the Brightwater treatment plant will be released into Puget Sound. The outfall pipe will be laid on the bottom of Puget Sound, to a distance approximately 5,000 feet from the shore at a water depth of 600 feet. Extensive studies conducted with the University of Washington show that the Brightwater outfall location is excellent for protecting water quality in Puget Sound.



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## ***What can you expect during construction?***

Because most of the conveyance construction will be deep underground, most impacts will occur at or near the portals, which will be very busy during construction.

The area immediately around these sites will be noisy and dusty. There may also be occasional traffic impacts like street closures and detours. However, King County and its contractors are committed to being good neighbors while construction is taking place. The county has already been working with jurisdictions and community members to address concerns and develop ways to minimize impacts and inconvenience. Neighbors will have access to a 24-hour construction hotline to call and report urgent concerns.

## ***After Construction – permanent conveyance facilities:***

Along with the actual pipelines, a number of conveyance facilities and structures will be needed. Above ground facilities at the North Creek portal will include a pump station and electrical substation. Other portals will have odor control, monitoring, and maintenance facilities. Permanent aboveground structures will be designed to fit the surrounding area.

## ***Working with you:***

Our goal is to build the Brightwater system to meet the needs of the region and the interests of the communities where facilities are located. To achieve this goal, we will continue to work closely with community members while work is underway.

## **For more information or to be added to our mailing list, please contact us:**

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## **Visit the project web site for the latest project information:**

<http://dnr.metrokc.gov/wtd/brightwater/>

**This information is available in alternative formats upon  
request by calling 206-296-1328 or Relay Service 711**

